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REPTILES AS FOOD

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IN these days when "conservation" is a byword and every man, woman and child is, or ought to be, thinking of the food problem, it may be of interest to notice the extent to which the comparatively small class of animals, the reptiles, are used as food, and to call attention to one or two ways in which they might be more extensively used.

For the sake of convenience, the class will be divided into the four old orders: the Chelonia, or turtles and terrapins; the Lacertilia, or lizards; the Ophidia, or serpents; and the Crocodylia, or crocodiles and alligators. Of these the first is the most important and will be first discussed.

Turtles are used for food over practically the entire world, but it is said their flesh is forbidden to Mohammedans, and is abhorred by certain Greeks.

Nearly, if not all, species may be eaten, but there is, of course, much difference in the quality of the flesh, and Surface states that during a strike of miners in eastern Pennsylvania many of them were made sick by eating turtles, supposedly the box tortoise, so that the common idea that this form is inedible, at least at certain seasons, is probably correct. There are also a few species whose offensive odor makes them undesirable as food. It is said that even the flesh of the green turtle, about to be described, is poisonous at certain seasons of the year in some countries where it is found.

THE GREEN TURTLE, *Chelone mydas*

This is, perhaps, the most important of the turtles as an article of food; it is an important article of commerce, and is an important part of the diet of some of the tropical peoples. It is found in tropical and semi-tropical seas throughout the world, and may reach a weight of five hundred pounds, though these huge ones, are not so good for food; those found in markets usually weigh from fifty to seventy-five pounds, and sell for about 35 cents per pound. The name has been given because of the green color of the flesh. Jamaica was formerly

and perhaps still is, one of the chief centers for the green turtle industry; Key West has also been an important center. In one year fifteen thousand animals were received into England, besides a large amount of dried meat in cans, the meat for canning being cut into strips and dried in the sun, where it acquires almost the consistency of glue and requires long soaking in water before it is fit for food. As in many other turtles, the oil may be extracted and used for culinary purposes in place of butter or olive oil.

In markets these turtles are kept lying on their backs not only to keep them from escaping, but because, being adapted to life in the water, they would not be able to breathe if laid upon a hard surface, right side up; their plastron is not firm like that of a land form, and the weight of the animal when not supported by the surrounding water so compresses the internal organs that suffocation is produced. The flesh may be cooked in various ways and is said to be very digestible.

The green turtle lays from two hundred to three hundred leathery-shelled eggs that are said to be more nutritious than hen's eggs; a dozen of them may be eaten at once. The eggs, which are carefully buried and concealed by the female, are found by prodding in the sand, along the shore, with a sharp stick.

Along the Amazon and Orinoco rivers the eggs of various turtles form a very important article of food; they are preserved by rolling and packing in salt, and in other ways. A kind of oil, much esteemed by the natives, is made from them, preserved in jars, and used like butter. The collection of such enormous numbers of eggs has nearly exterminated the apparently limitless numbers of turtles in some places.

The eggs of many of our common fresh-water turtles are good as food if taken from the animal or obtained soon enough after being laid.

THE LOGGERHEAD TURTLE, *Thalassochelys caretta*

This is another large, marine form, somewhat similar to the preceding, that is sometimes found in the markets, though it is of much less value.

THE DIAMOND-BACK TERRAPIN, *Malacoclemmys palustris*

This species is supposed to be the most delectable of all the turtles. It is a comparatively small animal, rarely reaching a length of ten inches, that is found in the salt marshes of our coast, from Massachusetts to Texas, those of Chesapeake Bay being, perhaps, the most famous. It has been named because

of the angular areas made by the concentric lines on the carapace.

They hibernate by burying themselves in the mud along the shore, whence they are tracked and dug out for sale in the markets. Their rarity and comparatively small size, combined with their unusual flavor, cause these turtles to be among the most expensive of our food products. A single animal of seven inches' length is worth about six dollars, and the price increases at the rate of about one dollar for each additional half inch in length; a seven-inch specimen weighs about four pounds. At such prices it would seem highly profitable to raise these turtles under artificial conditions. The experiment has been and is still being tried, but the slow growth of the animals and the small number of eggs produced each year make the enterprise a doubtful one from a financial point of view.

THE COMMON SNAPPING TURTLE, *Ghelydra serpentina*

This familiar chelonian inhabits ponds and slow-running streams of the United States east of the Rockies. It sometimes weighs as much as forty pounds and is named from its habit of snapping at any annoying object with such vigor that a human finger may be amputated by a moderate-sized specimen. They are sold in large numbers in some of the greater cities and bring about ten cents a pound.

The food of the snapper consists of all sorts of animal matter, and it is sometimes very destructive to ducks and other water fowl, destroying entire broods of the young birds. Should the snapper become a pest in the duck pond, it may be caught, according to Surface, by baiting a strong fish-hook with a piece of tainted meat and tying the line to a slender stake or tree that will bend when the turtle pulls. The hook must be fastened to the line by a length of slender wire, so that the turtle can not bite off the hook and escape.

In its feeding habits, then, it is probable that the snapper is more harmful than beneficial; the birds, frogs and fish it destroys more than making up for the insects and other pests that it eats.

THE SOFT-SHELLED TURTLES, *Genus Trionyx*

There are several species of soft-shelled turtles in the United States, and, while they are differently named by different writers, they may all be recognized by the soft, leathery character of the shell and by the proboscis-like snout. They are thought by some to be the most palatable of all our turtles

with the exception of the diamond-back, and, as a large specimen may reach a length of eighteen inches, they furnish, in some sections, quite a valuable supply of food.

Their omnivorous habits make it difficult to determine their economic importance in this regard. It is said they are very destructive to fish and water-fowl in some regions; on the other hand, they may do an important work as scavengers and as destroyers of insects. Many of them are savage in disposition and their jaws are capable of inflicting ugly wounds. Most of them are strictly aquatic in habits, being found in ponds and muddy streams, which they seldom leave.

The fresh-water turtles that are used for food or for scientific purposes are captured in various ways. Many of them are taken, sometimes scores in a day, by digging them out of the mud or sand in the bottom or along the shores of the ponds or streams in which they live. At the approach of winter they bury themselves in these places and hibernate until spring. With a pointed and barbed rod the hunter prods into the mud and on feeling a turtle pulls it up with the rod. Turtles are also caught on a line baited with meat, as mentioned above. In the case of the soft-shelled turtle the meat is kept near the surface by a cork. Wire traps, with funnel-shaped entrances like fish traps, are often used and are baited with ears of corn that become sour and attract the turtles. Such traps must be examined at moderately frequent intervals or the turtles may drown. The collection of fresh-water turtles, in some sections, is quite an important industry.

The lizards are important to mankind chiefly as destroyers of insects, but a few of them are used as food in tropical and semi-tropical lands. Of these the giant Iguanas, reaching a length of six feet or more, are the most important. The flesh of these lizards is said to be of a delicious flavor, resembling chicken. In the Bahamas the lizards were formerly one of the most important articles of food; they were hunted with dogs, and kept in captivity until wanted. They have been hunted almost to the point of extermination, in some localities. The way in which the early Spaniards overcame their repugnance to these ugly reptiles is told by Peter Martyn thus: "These serpentes are lyke unto crocodiles, saving in bygness; they call them guanas. Unto that day none of oure men durste adventure to taste them, by reason of theyre horrible deformitie and lothesomnes. Yet the Adlantado being entysed by the pleasantnes of the king's sister Anacaona, determined to taste the serpentes. But when he felte the flesh thereof to be so delicate

to his tongue, set to amayne without al fear. The which theyse companions perceiving, were not behynde hym in greedynesse; insomuche that they had now none other talke than of the sweetnesse of these serpentcs, which they affirm to be of more pleasantt taste than eyther our phesantes or partriches."

The eggs of the larger lizards are also used as food in some countries.

Though snakes are esteemed as food in many lands, it is not likely that they will ever be an important article of diet in this country, both because of the almost universal repugnance with which they are regarded and because of the comparative scarcity of large serpents within our borders. Our larger black snakes, though reaching a considerable length, are so slender that the amount of flesh in their bodies is not great, and there is probably hardly one person in ten thousand who would knowingly eat a snake.

With the crocodilia the matter of size cannot be raised as an objection, since the largest members of this order may reach a length of thirty feet and a weight of many hundreds of pounds. Of course, neither an alligator nor a crocodile is a very attractive looking animal, but when skinned and dismembered the body looks no more repulsive than any other carcass that may be seen in any butcher's shop, and the flesh is as white and attractive-looking as the best beef or pork. The eggs of the crocodilia, which are usually about as large as those of a goose, are often eaten by the natives of the tropics. Never having eaten an alligator egg, I can not speak from personal experience of its flavor; but it has always seemed strange to me that more use is not made of the flesh of the alligator. This flesh is often said to have too strong a flavor to be palatable; I have eaten it, and it had no such rank taste, but was decidedly agreeable, being, as might perhaps be expected of so amphibious an animal, somewhat like both fish and flesh, yet not exactly like either. Perhaps greater care should be taken in skinning an animal that is to be used for food in order that the flesh be not tainted with the musk. It may be a lack of care in preparation that has given rise to the impression that alligator meat is too strong to be pleasant. It is perhaps, also, the "idea" of eating a reptile that makes the meat unpopular. A half-grown boy, who was once in the swamps with me, had expressed a great aversion to alligator meat, so the guide, one day, offered him a nicely fried piece of alligator meat, saying it was fish; the meat was eaten with evident relish and the diner was not told until after a second piece had disappeared what he had been eating.

It always seemed strange to me that the poor people of the south should not more often vary the monotony of fat pork and corn bread with alligator steaks. Whether the meat could be smoked, or salted or canned so that it would keep in a hot climate I do not know; I am not aware of any experiments along this line. But it would seem as though it could at least be canned as well as any other kind of meat.

Another point that would have to be determined is whether the flesh of the crocodilia of Central and South America is as pleasant to eat as that of the Florida alligator noted above, because the latter animal has been so persistently hunted by sportsmen and hide hunters that its members have been greatly reduced, in fact, almost to the verge of extinction in many regions. In many parts of tropical America the various species of crocodiles and caymans are said to be very abundant, so that if a means could be devised to preserve the flesh near the place where the animals are killed, a large supply of meat might be obtained. At the same time, the hides, though not of such good quality as the Florida skins, might be of considerable value in these times of scarce leather.

It is probable that, on account of the general prejudice against eating reptiles, it would be necessary to give the commercial product some trade name, such as is being used to induce the finicky American public to eat certain sharks and other perfectly good sea fishes. The selection of such a name would be an easy matter, and if the canned "Yacare," as the flesh of the cayman is called in South America, should prove as palatable as the freshly fried alligator steak, it would have a ready sale.

We Americans have a lot of silly ideas about what is fit for food and what is not, and it is time that we got rid of some of them.